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REMARKS

Claims 14, 15 and 19-20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons noted in the official action. The rejected claims are accordingly amended, by the above claim amendments, and the presently pending claims are now believed to particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming all of the raised § 112, second paragraph, rejections. The entered claim amendments are directed solely at overcoming the raised indefiniteness rejection(s) and are not directed at distinguishing the present invention from the art of record in this case.

Initially, the Applicant thanks the Examiner for indicating that claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in to overcome the 35 U.S.C. 112 rejections of Official Action. In accordance with this indication, claim 19 is appropriately rewritten in independent form and such amended independent claim is now believed to be allowable. As claim 20 depends from that independent claim, dependent claim 20 is also believed to be allowable.

Claims 12, 14 and 22 are rejected, under 35 U.S.C. § 102(b), as being anticipated by Peter `184 while claims 12, 14 and 22 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Friedrich `550 in view of Peter `184. The Applicant acknowledges and respectfully traverses the raised anticipatory and obviousness rejections in view of the following remarks.

Peter `184 discloses an epicyclic gear box for a flanged integration with an electric motor. The gearbox has an input shaft 21 which receives a drive shaft 11 of the electric motor. As can be seen in Exhibit 3, supplied by the Examiner, the drive shaft 11 extends through the receiving section (section A) of the input shaft and into the first axial section (section B). In other words, the Applicant respectfully submits that the receiving area of Peter `184 axially extends to at least where the sealing elements 42 are located. The lead line to the drive shaft 11 points to a section well past the receiving section (colored in red) as construed by the

Examiner. This is in distinct contrast to the entered limitations of the presently claimed invention.

Friedrich `550 discloses a gear box for robotic devices. The gear box has a meshed gear set connected to a motor output drive. Fig. 1 (Exhibit 1) of Friedrich `550 shows a receiving area C (the area colored red by the Examiner). The Examiner suggests that the receiving area ends at the end of the red colored section. However, as can be seen in the Exhibit 1, the receiving section does not end at the red section C, but extends through the green section (the area colored green by the Examiner). As pointed out by the Examiner, the output motor shaft 26 extends into this hollow section of the sun gear shaft B. In other words, the Applicant respectfully submits that the receiving area of Friedrich `550 axially extends along the sun gear shaft well beyond the point where the sealing elements 16 are located. This is in distinct contrast to the presently claimed limitation of the presently claimed invention.

With respect to the base references of Peter `184 and Friedrich `550, it is respectfully submitted that neither one of those references in any way teach, suggest or disclose an arrangement in which a sun gear bearing, for the sun gear shaft 4, is located between an end stop of the receiving section 16, e.g., a bottom of the receiving section 16, and the plurality of planetary gear wheels 10 while also being positioned radially inward of an inner ring of the planet carrier bearing 30. This results in a compact arrangement for these components which is novel and patentable over the two applied base references.

A further distinction between the present invention and all of the art of record, including newly cited EP `048, is that the sun gear bearing 28 and the sealing element 22 both engage with the sun gear shaft 4 and are located radially inward of an inner ring of a first planetary carrier bearing which surrounds the sun gear shaft 4. That is, both the sealing element 22 and the sun gear bearing 28 are accommodated radially within the inner ring of the first planetary carrier bearing 30. As such an arrangement is not in any way taught, suggested or disclosed by any of the prior art of record in this case.

In order to emphasize the above noted distinctions between the presently claimed invention and the applied base references, the independent claim 12 of this application now recites the features of "a sun gear bearing (28) for the sun gear shaft (4) is located radially inward of an inner ring of a planetary carrier bearing (30), axially at least partly within a space occupied by the planetary carrier bearing (30) and between an end stop of the receiving section (16) and the planetary gear wheels".

New claim 23 recites that "a sun gear bearing (28), for the sun gear shaft (4), and the sealing element (22) are both located axially adjacent one another between an end stop of the receiving section (16) and the plurality of planetary gear wheels (10)" while claims 24, 28 and 29, dependent upon claims 23, 12 and 19, respectively, further recite that "the sun gear bearing (28) and the sealing element (22) both engage with the sun gear shaft (4) and are located radially inward of an inner ring of a first planetary carrier bearing (30) surrounding the sun gear shaft (4)." Such features are believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art.

Next, claims 12, 14 and 22 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Friedrich `550 in view of Peter `184; claim 15 is rejected, under 35 U.S.C. § 103(a), as being unpatentable over Peter `184 in view of Fritsch `547; while claim 17 is rejected, under 35 U.S.C. § 103(a), as being unpatentable over Fritsch `550 in view of Peter `85 as applied to claims 12 and 14 and further in view of Bayer `813. The Applicant acknowledges and respectfully traverses all of the raised obviousness rejections in view of the following remarks.

The Applicant acknowledges that the additional references of Fritsch `547 and Bayer `813 may arguably relate to the additional features indicated by the Examiner in the official action. Nevertheless, the Applicant respectfully submits that the combination of the base references of either or both Friedrich `550 and/or Peter `184 with this additional art still fails to in any way teach, suggest or disclose the above distinguishing features of the presently claimed

invention note above. As such, all of the raised rejections should be withdrawn at this time in view of the above amendments and remarks.

Lastly, the Applicant draws the Examiner's attention to the European Patent Application EPO 0 567 048 A1 (EPO '048) which has recently come to the attention of the Applicant during prosecution of a related European Patent Application and is properly made of record in this case per the attached Information Disclosure Statement.

With respect to this newly uncovered reference, this citation relates to a gearbox motor adapter. The Applicant recognizes the gearbox motor adapter shows the seal and the sun gear bearing both positioned axially away from the receiving section of the motor shaft 17 (as can best be seen in Fig. 12). However, it is respectfully submitted that this reference fails to in any way teach, suggest or disclose the seal (not number) and the bearing (not number) being located adjacent one another and between an end stop of the receiving section (16) and the planetary gear wheels, as presently recited. That is, the seal (not number) is on one side of the planetary gear wheels while the bearing (not number) is on the opposite side of the planetary gear wheels—not between the end stop and the planetary gear wheels. Further, EPO '048 fails to in any way teach, suggest or disclose a sun gear bearing (28) and a sealing element (22) both located radially inward of an inner ring of a first planetary carrier bearing (30) which surrounds the sun gear shaft (4), as presently recited.

In the event that a petition and/or fee is necessary for consideration of this newly submitted art, please charge the same to our Deposit Account (04-0213).

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the



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Friedrich '550, Peter '184, Fritsch '547 and/or Bayer '813 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

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GROUP 3600

Respectfully submitted,


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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service, with sufficient postage, as First Class Mail in an envelope addressed to: Director of the United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. June 15, 2004.

By: 

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